



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,412	06/23/2000	Melvin Richard Zimowski	ST9-99-080	9095

23373 7590 05/10/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

NGUYEN, QUANG N

ART UNIT PAPER NUMBER

2141

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,412

Applicant(s)

ZIMOWSKI, MELVIN RICHARD

Examiner

Quang N Nguyen

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/25/2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. This Office Action is in response to the Request for Reconsideration filed on 04/13/2005. Claims 1-39 remain for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claim 1, 4 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Daugherty et al. (US 6,345,292), herein after referred as Daugherty.**

4. As to claim 1, Daugherty teaches a web page rendering architecture, comprising:
determining that a web page to be cached, wherein the web page references other objects (*depending on the requested URL, the ISAPI 106 references and caches an XML data structures, i.e., XML files that specifies/references HTML clips made up the web page*) (Daugherty, C5: L41-48);

storing the referenced objects in one or more data stores (*the referenced HTML clips/objects are provided and stored in the second-level cache 112, and also provided to and stored in the first-level cache 110*) (Daugherty, C7: L20-24);

caching the web page in a cache (*the XML data structures/files may be cached*) (Daugherty, C5: L41-48); and

automatically managing the cached web page and the referenced objects to ensure the display of a complete web page (*once all the HTML clips, i.e., all the referenced objects, have been retrieved, the server 102 returns them to the browser 100 for display thereon, and the server 102 also returns the completed web page*) (Daugherty, C5: L37-40).

5. As to claim 4, Daugherty teaches the method of claim 1, further comprising:
receiving a request (*from browser 100*) to generate a dynamic web page; and
retrieving data and placing the data in a dynamically generated web page (*the ISAPI 106 retrieves all the HTML clips made up the web page and returns the completed web page to the browser 100*), wherein the data is linked to other stored objects (*the web page is made up of a number of HTML clips*) (Daugherty, C5: L14-40).

6. As to claim 37, Daugherty teaches the method of claim 1, wherein at least one of the referenced objects is not stored in said cache *(if it is not stored at the first-level cache 110, it could be stored at any of the second-level cache 112, fetcher database 208 or external content providers 210 as illustrated in Fig. 3).*

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daugherty, in view of Major (US 6,542,967).**

9. As to claims 2-3, Daugherty teaches the method of claim 1, but does not explicitly teach when one or more of the referenced objects is deleted, deleting the web page from the cache and vice versa.

In a related art, Major teaches a cache object store is organized to provide fast and efficient storage of data as cache objects organized into cache object groups, wherein during a write (*i.e., move or delete*) operation affecting any portion of the cache object group, the entire group is written (Major, C5: L46-59).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Daugherty and Major to delete the web page from the cache when one or more of the referenced objects is deleted and vice versa since such methods were conventionally employed in the art to allow the system to organize and manage a cache object store to provide fast and efficient retrieval and storage of data as cache objects transferred over a computer network.

10. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daugherty.

11. As to claims 5-6, Daugherty teaches the method of claim 4, but does not explicitly teach receiving an administrative request to delete the retrieved data or linked objects and in turn deletion of the same.

"Official Notice" is taken both the concept and advantages of having an administrator in a computer system with the right to delete data and actual deletion of the data are well known and expected in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include allowing administrative requests for the deletion of data since such methods were conventionally employed in the art to allow the administrator to (manually) delete the data (contents associated with downloaded links) to clean up the storage and make room for storing new, higher priority information.

12. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daugherty, in view of Burns et al. (US 6,298,373).

13. As to claim 7, Daugherty teaches the method of claim 1, but does not explicitly teach processing a caching directive that specifies whether the web page should be cached.

In a related art, Burns teaches a local service provider for full based intelligent caching system, wherein the local service provider includes a policy manager which defines and administers rules that determine which documents or resources are cached in the cache memory (Burns, Fig. 4 and C10: L48-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Daugherty and Burns to include processing a caching directive that specifies whether the web page should be cached since such methods were conventionally employed in the art to allow the system deciding which content is cached at the local service provider to adapt to the often changing patterns of its clientele (Burns, C10: L37-40).

14. As to claims 8-9, Daugherty-Burns teaches the method of claim 1, further comprising, associating an expiration timestamp with the web page, wherein the expiration stamp defines a time period in which the cached web page is valid (*time-to-live "TTL" tags are assigned to the content to assist in determining when the content should be refreshed or disposed, i.e., when the time-to-live "TTL" expires, the content is no longer valid and should be updated or deleted*) (Burns, C10:L59 - C11:L19).

15. As to claim 11, Daugherty-Burns teaches the method of claim 8, wherein managing the cached web page and referenced objects comprising:

receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria (*the local service providers, i.e., the administrators, might compute the TTL tags for the content it caches in cache memory based on some specified selection criteria*) (Burns, C10:L65 – C11:L14); and

deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria (*deletion policies are a function of the content itself, for example, when the "TTL" set by the administrator expires, how frequently the content is requested, etc., the content will be deleted*) (Burns, C11: L15-19).

16. Claims 10 and 12 are corresponding method claims of method claims 2-3; therefore, they are rejected under the same rationale.

17. Claims 13-36 and 38-39 are corresponding apparatus and article or manufacture claims of method claims 1-12 and 37; therefore, they are rejected under the same rationale.

Response to Arguments

18. In the remarks, Applicant argued in substance that

(A) Prior Art does not teach or suggest, “determining that a web page is to be cached, wherein the web page references other objects” as claimed in the invention.

As to point (A), before addressing the argument, Examiner submits that the language in the quotation “a web page” could be given a broadest and reasonable interpretation as a document on the World Wide Web consisting of an HTML file (or XML file, wherein XML is a condensed form of SGML and has been designed for ease of implementation and interoperability with both SGML and HTML), with associated files for graphics and scripts, in a particular directory on a particular machine (by Microsoft Computer Dictionary – Fifth Edition). Daugherty teaches the architecture for rendering web pages, wherein depending on the requested URL/Web page, the Internet Server Application Programming Interface (ISAPI) 106 references a data structure in eXtensible Markup Language XML format that specifies different HTML clips for that web page (i.e., XML data structure references objects for that web page) and the XML data structures may be cached (i.e., determining that a web page is to be cached depending on the requested URL/Web page) (Daugherty, C5: L41-48).

(B) Prior Art does not teach or suggest, “storing the referenced objects in one or more data stores”, as claimed in the invention.

As to point (B), **Daugherty** teaches the requested HTML clips are provided and stored in the second-level cache 112, provided to and also stored in the first-level cache 110 (*i.e., storing the referenced objects in one or more data stores*) (**Daugherty, C7: L20-24**).

(C) Prior Art does not teach or suggest, “caching the web page in a cache”, as claimed in the invention.

As to point (C), **Daugherty** teaches the XML data structures (*i.e., XML files*) specifying/referencing the HTML clips/files may be cached (**Daugherty, C5: L41-48**).

(D) Prior Art does not teach or suggest, “automatically managing the cached web page and the referenced objects to ensure the display of a complete web page”, as claimed in the invention.

As to point (D), **Daugherty** teaches once all the HTML clips have been retrieved from one or more data stores (*either retrieved from the first-level cache 110 or from the second-level cache 112*), the server 102 returns them to the browser 100 for display thereon, the server 102 returns the completed web page (**Daugherty, C5: L37-40**).

19. Applicant's arguments as well as request for reconsideration filed on 04/13/2005 have been fully considered but they are not deemed to be persuasive.


20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER